

IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

1. (Currently Amended) A method comprising:
determining a sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit;
~~translating the sustainable power level into~~ calculating a maximum allowable data transfer rate based on the sustainable power level; and
adjusting operation of the integrated circuit such that the maximum allowable data transfer rate is not exceeded.
2. (Cancelled)
3. (Previously Presented) The method of claim 1, wherein the environmental system characteristics are stored within the BIOS.
4. (Cancelled)
5. (Previously Presented) The method of claim 1, wherein the design characteristics are stored within the integrated circuit.
6. (Original) The method of claim 1, wherein the integrated circuit comprises a memory module.

7. (Original) The method of claim 6, wherein the memory module comprises a RDRAM memory module.

8. (Cancelled)

9. (Previously Presented) The method of claim 1, wherein adjusting operation of the integrated circuit further comprises:

monitoring an amount of data transferred to and/or from the integrated circuit; and

reducing the amount of data transferred if the amount of data transferred results in a data transfer rate that exceeds the maximum allowable data transfer rate.

10. (Currently Amended) The method of claim 1, wherein adjusting operation of the integrated circuit further comprises determining an amount of time for which the maximum allowable data transfer rate can be sustained.

11. (Currently Amended) A apparatus comprising:

a unit to determine a maximum sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, wherein the maximum sustainable power level includes an amount of power that the integrated circuit can dissipate without exceeding temperature thresholds of components of the integrated circuit;

a unit to translate the maximum sustainable power level into a maximum allowable data transfer rate; and

a unit to adjust operation of the integrated circuit such that the maximum allowable data transfer rate is not exceeded.

12. (Previously Presented) The apparatus of claim 11, wherein design characteristics stored within the integrated circuit.

13. (Previously Presented) The apparatus of claim 11, wherein the environmental system characteristics further include active, idle, and standby power consumption levels stored within the integrated circuit.

14. (Original) The apparatus of claim 11, wherein the integrated circuit comprises a memory module.

15. (Currently Amended) A system comprising:

a RDRAM memory module;

a unit to determine a maximum sustainable power level for the integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, wherein the maximum sustainable power level includes an amount of power that the integrated circuit can dissipate without exceeding temperature thresholds of components of the integrated circuit;

a unit to translate the maximum sustainable power level into a maximum allowable data transfer rate; and

a unit to adjust operation of the integrated circuit such that the maximum allowable data transfer rate is not exceeded.

16. (Previously Presented) The system of claim 15, wherein the integrated circuit comprises a memory module having at least a portion of the environmental system characteristics stored thereon.

17. (Previously Presented) The system of claim 15, wherein the environmental system characteristics further include active, idle, and standby power consumption levels stored within the integrated circuit.

18. (Currently Amended) The system of claim 15, wherein the ~~maximum performance characteristic comprises a~~ maximum allowable data transfer rate represents a maximum performance characteristic.

19. (Currently Amended) An article of manufacture comprising a machine readable medium having a plurality of machine readable instructions stored thereon, wherein the instructions, when executed by a processor, cause the processor to:

determine a maximum sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, wherein the maximum sustainable power level includes an amount of power that the integrated circuit can dissipate without exceeding temperature thresholds of components of the integrated circuit;

translate the sustainable power level into a maximum allowable data transfer rate; and
adjust operation of the integrated circuit such that the maximum allowable data transfer rate is not exceeded.

20. (Original) The article of manufacture of claim 19, further comprising instructions that, when executed by a processor, cause the processor to adjust operation of the integrated circuit by determining an amount of time for which the maximum allowable data transfer rate may be sustained.

21. (Previously Presented) The method of claim 1, wherein said determining is performed by a BIOS.

22. (Previously Presented) The method of claim 1, wherein the design characteristics are stored on a serial presence detect (SPD) device.

23. (Previously Presented) The method of claim 22, wherein the SPD is on the integrated circuit.

24. (Currently Amended) A system comprising:

a RDRAM memory module; and

a machine readable medium having a plurality of machine readable instructions stored thereon, wherein the instructions, when executed by a processor, cause the processor to:

determine a maximum sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, wherein the maximum sustainable power level includes an amount of power that the integrated circuit can dissipate without exceeding temperature thresholds of components of the integrated circuit;

translate the maximum sustainable power level into a maximum allowable data transfer rate; and

adjust operation of the integrated circuit such that the maximum allowable data transfer rate is not exceeded.

25. (Currently Amended) An apparatus comprising:

means for determining a maximum sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, wherein the maximum sustainable power level includes an amount of power that the integrated circuit can dissipate without exceeding temperature thresholds of components of the integrated circuit;

means for translating the maximum sustainable power level into a maximum allowable data transfer rate; and

means for adjusting operation of the integrated circuit such that the maximum allowable data transfer rate is not exceeded.